# Fall 2018 Levee Maintenance Deficiency Summary Report

Overall LMA & Unit Ratings, including USACE Erosion Survey

#### Sacramento River Basin

	Overall LMA	Total LMA						
ST0010 Sutter Maintenance Yard Wadsworth	Rating	Miles						
Canal	U	9.22						
5		Maintenance Deficiency			Enforcement		Design & System Obsolescence	
Rated Item	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
Earthen Levee								
Animal Control	0.04	0.01	0.08	0.87%				
Slope Stability	0.02		0.02	0.22%				
Erosion / Bank Caving	0.01	0.02	0.09	0.98%				
Cracking							0.01	
Supplemental								
2017 USACE Erosion Survey, DRAFT	5.58		5.58	60.49%				
DWR UCIP Field Study					0.11	0.02		
LMA Totals:	5.65	0.03	5.77	62.55%	0.11	0.02	0.01	0.00
Unit No. 01 Wadsworth Canal LB	Overall Unit	Total Unit						
omenor or maconorm canal 22	Rating	Miles						
ST0010	U	4.63						
	Maintenance Deficiency		Enforcement		Design & System Obsolescence			
Rated Item	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
Earthen Levee								
Animal Control	0.01		0.01	0.22%				
Francisco / Devolution	0.01	0.02	0.09	1.95%				
Erosion / Bank Caving	0.01	0.02						
Supplemental	0.01	0.02						
Supplemental 2017 USACE Erosion Survey, DRAFT	2.80	0.02	2.80	60.53%				
Supplemental		0.02	2.80	60.53%	0.06			
Supplemental 2017 USACE Erosion Survey, DRAFT		0.02	2.80	60.53%	0.06	0.00	0.00	0.00
Supplemental 2017 USACE Erosion Survey, DRAFT DWR UCIP Field Study	2.80					0.00	0.00	0.00
Supplemental 2017 USACE Erosion Survey, DRAFT DWR UCIP Field Study Unit Totals:	2.80	0.02				0.00	0.00	0.00
Supplemental 2017 USACE Erosion Survey, DRAFT DWR UCIP Field Study Unit Totals:  Unit No. 02 Wadsworth Canal RB	2.80 2.82 Overall Unit	0.02				0.00	0.00	0.00
Supplemental 2017 USACE Erosion Survey, DRAFT DWR UCIP Field Study Unit Totals:  Unit No. 02 Wadsworth Canal RB  ST0010	2.80  2.82  Overall Unit Rating	0.02 Total Unit Miles 4.60	2.90		0.06	0.00	Design 8	k System
Supplemental 2017 USACE Erosion Survey, DRAFT DWR UCIP Field Study Unit Totals:  Unit No. 02 Wadsworth Canal RB	2.80  2.82  Overall Unit Rating	0.02 Total Unit Miles 4.60			0.06			k System
Supplemental 2017 USACE Erosion Survey, DRAFT DWR UCIP Field Study Unit Totals:  Unit No. 02 Wadsworth Canal RB  ST0010	2.80 2.82  Overall Unit Rating U	0.02  Total Unit Miles  4.60  Maintena	2.90	62.69%	0.06	ement	Design & Obsole	& System scence
Supplemental 2017 USACE Erosion Survey, DRAFT DWR UCIP Field Study Unit Totals:  Unit No. 02 Wadsworth Canal RB  ST0010  Rated Item	2.80 2.82  Overall Unit Rating U	0.02  Total Unit Miles  4.60  Maintena	2.90	62.69%	0.06	ement	Design & Obsole	& System scence
Supplemental 2017 USACE Erosion Survey, DRAFT DWR UCIP Field Study Unit Totals:  Unit No. 02 Wadsworth Canal RB  ST0010  Rated Item  Earthen Levee	2.80  2.82  Overall Unit Rating  U  M Miles	0.02  Total Unit Miles  4.60  Maintena  U Miles	2.90  nce Deficiency  M + 4U Miles	62.69% Threshold %	0.06	ement	Design & Obsole	& System scence
Supplemental 2017 USACE Erosion Survey, DRAFT DWR UCIP Field Study Unit Totals:  Unit No. 02 Wadsworth Canal RB  ST0010  Rated Item  Earthen Levee Animal Control	2.80  2.82  Overall Unit Rating  U  M Miles  0.03	0.02  Total Unit Miles  4.60  Maintena  U Miles	2.90  nce Deficiency  M + 4U Miles  0.07	62.69%  Threshold %  1.52%	0.06	ement	Design & Obsole	& System scence
Supplemental 2017 USACE Erosion Survey, DRAFT DWR UCIP Field Study Unit Totals:  Unit No. 02 Wadsworth Canal RB  ST0010  Rated Item  Earthen Levee Animal Control Slope Stability Cracking Supplemental	2.80  2.82  Overall Unit Rating  U  M Miles  0.03	0.02  Total Unit Miles  4.60  Maintena  U Miles	2.90  nce Deficiency  M + 4U Miles  0.07	62.69%  Threshold %  1.52%	0.06	ement	Design 8 Obsole M Miles	& System scence
Supplemental 2017 USACE Erosion Survey, DRAFT DWR UCIP Field Study Unit Totals:  Unit No. 02 Wadsworth Canal RB  ST0010  Rated Item  Earthen Levee  Animal Control Slope Stability Cracking	2.80  2.82  Overall Unit Rating  U  M Miles  0.03	0.02  Total Unit Miles  4.60  Maintena  U Miles	2.90  nce Deficiency  M + 4U Miles  0.07	62.69%  Threshold %  1.52%	0.06	ement	Design 8 Obsole M Miles	& System scence
Supplemental 2017 USACE Erosion Survey, DRAFT DWR UCIP Field Study Unit Totals:  Unit No. 02 Wadsworth Canal RB  ST0010  Rated Item  Earthen Levee Animal Control Slope Stability Cracking Supplemental	2.80  2.82  Overall Unit Rating  U  M Miles  0.03  0.02	0.02  Total Unit Miles  4.60  Maintena  U Miles	2.90  nce Deficiency  M + 4U Miles  0.07  0.02	62.69%  Threshold %  1.52%  0.44%	0.06	ement	Design 8 Obsole M Miles	& System scence

Winter \*\*

#### Flood Control Project Maintenance Levee Inspections

# **LMA District Cover Sheet**

Fall 2018 Levee Inspection Results

# **Sutter Maintenance Yard Wadsworth Canal**

Summer \*\*

Fall

Spring

	(March - May)	(June - August)	(September - November)	(December - February)
† Overall LMA Rating (Fall Only)			U	
	** Non-receipt of Summ Reports may effect o			
SPRING INSPECTIONS: Overall maintenance deficiencies are rated	ratings are not detern d using the same crite			ual maintenance
FALL INSPECTIONS: The overall maintena within the attached u			ation and maintenance de tended to be an indiction of	
Comments				

## **Unit Cover Sheet**

#### Fall 2018 Levee Inspection Results

#### **Sutter Maintenance Yard Wadsworth Canal**

Waterway	Bank	Unit Miles
Unit No. 01 Wadsworth Canal	Left	4.63

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			U	
Date of Inspection	3/29/2018 - 3/29/2018		11/6/2018 - 11/6/2018	
DWR Inspector	Bob Duffey		Bob Duffey	
Accompanied By	Steve Beckley Sutter Maintenance Yard		Steve Beckley Sutter Maintenance Yard	

#### Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

#### http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard Wadsworth Canal**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Wadsworth Canal	Left	4.63	11/06/2018 11/06/2018	Bob Duffey

LM Start		Rating **	Α	Issue No.		10	
LM End		Issue Type +	Ма	Location *		N/A	
Category	Earthen Levee			GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item		s & Maintena	nce		0		0
пеш	Manuals				0		0
DWR ID	DWR_ST0	010_01_s _ 201	3_10				
		Comn	nent Cod	de			
		Inspecto	or Comm	nent			
The LMA h	nas the O8	M manuals.					

No Photos

Rating \*\* Issue No. Α 11 LM Start Location \* LM End Issue Type + Ма N/A Earthen Levee GPS Latitude/Longitude Category Start End Emergency Supplies & Item Equipment DWR\_ST0010\_01\_s \_ 2013\_11 DWR ID Comment Code

No Photos

Inspector Comment
The LMA has flood fight supplies and equipment.

LM Start		Rating **	Α	Issue No.		12	
LM End		Issue Type +	Ма	Location *		N/A	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item	Flood Pre	paredness &	Training		0		0
item					0		0
DWR ID	DWR_ST00	010_01_s _ 201	3_12				
		Comn	nent Cod	le			
			_				
		Inspecto	or Comm	ient			
The LMA o	completed	flood fight trai	ning in 2	018.			

No Photos

En: Enforcement

U : Unacceptable

# Levee Inspection Report By Mile - Fall 2018

#### **Sutter Maintenance Yard Wadsworth Canal**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Wadsworth Canal	Left	4.63	11/06/2018 11/06/2018	Bob Duffey

LM Start	0.02	Rating **	М	Issue No.		108
LM End	0.02	Issue Type +	En	Location *		
Category	Supplemental					e/Longitude
Calegory				Start		End
Item	DWR UCI	P Field Study		39.1136	70°	39.113670°
пеш				-121.7683	10°	-121.768310°
DWR ID	17068					

Comment Code

Inspector Comment

FS\_ID:51492 DS\_ID:17068 EP\_NO: 5296

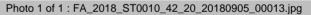
Repair Type: Non-Urgent Crossing Status: Not Found

UCIP Comments: 4/10/2017 Unable to locate. (DWR Sutter Yard-AFreitag)10/12/2016 Unable to locate.(DWR Sutter Yard-afreitag)4/19/2016 Unable to locate.5/12/2015 Unable to locate.11/18/2014 Unable to locate.5/13/2014 Same as last inspection.10/29/2013 Same as last inspection.5/16/2013 Same as last inspection.10/09/2012 Need to determine disposition of pipe, contact pipe owner if possible. (W. Wylie - DWR UCIP)
FIELD\_STRUCT\_DESC: 3.5-inch steel gas line through the levee, 3 feet below the crown. Gas line goes through both levees and Wadsworth Canal. Waterside (WS) bank protected by rock. (Permit No. 5296, 1966 - Atlantic Oil Company). [Additional Reference(s): DWR Levee Log, 2005].

FS Date: 4/12/2017 9:31:56 AM

LM Start	0.06	Rating **	A/W	Issue No.		20
LM End	0.12	Issue Type +	Ma	Location *		WS
Category	Cotogon Earthen Levee				atitud	e/Longitude
Calegory				Start		End
Item	Erosion /	Bank Caving		39.1142	203 °	39.114842°
пеш				-121.7680	)15°	-121.767382°
DWR ID	DWR_ST0	010_01_f _ 2010	6_20			
		Comn	nent Cod	de		
E1: Note a	and monito	or erosion site				
		Inspecto	or Comm	nent		
Monitor the	e erosion a	along the water	rside to	Э.		

No Photos





View of the erosion along the waterside toe.

# **Levee Inspection Report By Mile - Fall 2018**

#### **Sutter Maintenance Yard Wadsworth Canal**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Wadsworth Canal	Left	4.63	11/06/2018 11/06/2018	Bob Duffey

LM Start	0.38	Rating **	A/W	Issue No.		19	
LM End	0.38	Issue Type +	Ma	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Erosion / I	Bank Caving		39.1179	10°	39.117910°	
пеш				-121.7644	97°	-121.764497°	
DWR ID	DWR_ST00	010_01_f _ 2016	6_19				
		Comn	nent Cod	de			
E1: Note a	and monito	or erosion site					
		Inspecto	or Comm	nent			
Monitor the	Monitor the erosion along the waterside toe.						

Photo 1 of 1 : FA\_2018\_ST0010\_42\_19\_20180905\_00012.jpg



View of the erosion along the waterside toe.

LM Start	0.50	Rating **	U	Issue No.		22	
LM End	0.50	Issue Type +	Ma	Location *		WS	
Category	Earthen Levee					e/Longitude	
Calegory				Start		End	
Item	Erosion /	Bank Caving		39.1193	48°	39.119348°	
пеш		-121.763120 ° -121.76312					
DWR ID DWR_ST0010_01_f _ 2017_22						·	
		_	_				

#### Comment Code

E2: Schedule repair of erosion site prior to the next inspection.

#### Inspector Comment

Repair the beaver hole along the waterside berm.

#### Photo 1 of 1: FA\_2018\_ST0010\_42\_22\_20180905\_00014.jpg



View of the beaver hole along the waterside berm.

Photo 1 of 1: FA\_2018\_ST0010\_42\_18\_20180905\_00011.jpg

LM Start	0.56	Rating **	М	Issue No.		18	
LM End	0.56	Issue Type +	Ma	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Erosion /	Bank Caving		39.1199	85°	39.119985	0
пеш				-121.7626	00°	-121.762600	0
DWR ID	DWR STO	010_01_s _ 201	7 18				

#### Comment Code

E2 : Schedule repair of erosion site prior to the next inspection.

#### Inspector Comment

Repair the erosion along the water side toe.



View of the erosion along the waterside toe caused by a tree that fell into the water.

\* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiency Ob: Design & System Obsolescence C: Corrected AW: Acceptable but Monitor & Maintain

\*\* Rating

A: Acceptable C: Corrected Ob: Design & System Obsolescence En: Enforcement

# Levee Inspection Report By Mile - Fall 2018

#### **Sutter Maintenance Yard Wadsworth Canal**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Wadsworth Canal	Left	4.63	11/06/2018 11/06/2018	Bob Duffey

LM Start	1.21	Rating **	М	Issue No.		109
LM End	1.21	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UCI	P Field Study		39.1275	66°	39.127566 °
пеш				-121.7552	82 °	-121.755282 °
DWR ID	17059					

# Inspector Comment

Comment Code

FS\_ID:51493 DS\_ID:17059 EP\_NO: 1605

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/10/2017 Abandoned. (DWR Sutter Yard-AFreitag)10/12/2016 Abandoned crossing. (DWR Sutter Yard - afreitag)4/16/2016 Abandoned crossing. Ws pipe end is open and should be capped.5/12/2015 Abandoned crossing. Needs to be properly abandoned.11/18/2014 Same as last inspection.5/13/2014 Same as last inspection.5/16/2013 Same as last inspection.10/29/2013 Same as last inspection.5/16/2013 Same as last inspection.10/09/2012 No pump on Pier and power lines cut. Apparently abandoned-should be abandoned properly. (W. Wylie - DWR UCIP)
FIELD\_STRUCT\_DESC: \*ABANDONED\* 18-inch steel irrigation pipe

(permit records indicate 16-inch pipe) through the levee, 3.7 feet below the crown. Siphon breaker on the waterside (WS) slope. Pump on channel bank on steel structure. (16-inch pipe authorized under Permit No. 1605, 1959 - Schnabel. Aerial 12 KV power line extension for pump authorized under Permit No. 1631, 1959 - Pacific Gas and Electric Company [PG&E]). [Additional Reference(s): DWR Levee Log, 2005]. FS Date: 4/12/2017 9:32:31 AM

 LM Start
 1.21
 Rating \*\*
 M
 Issue No.
 109 (cont)

 LM End
 1.21
 Issue Type +
 En
 Location \*



Power pole with cut powerlines, pump missing from steel pier.

#### Photo 2 of 3: UCIP\_FA\_2018\_51493\_64701.jpg



Pipe on LS toe.

# Levee Inspection Report By Mile - Fall 2018

#### **Sutter Maintenance Yard Wadsworth Canal**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Wadsworth Canal	Left	4.63	11/06/2018 11/06/2018	Bob Duffey

LM Start	1.21	Rating **	M	Issue No.		109 (cont)
LM End	1.21	Issue Type +	En	Location *		
Category	Suppleme	ental	GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UCI	P Field Study		39.12756	6°	39.127566°
пеш				-121.75528	2 °	-121.755282°
DWR ID	17059					·

# Comment Code

#### Inspector Comment

FS ID:51493 DS\_ID:17059 EP\_NO: 1605

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/10/2017 Abandoned. (DWR Sutter Yard-AFreitag)10/12/2016 Abandoned crossing (DWR Sutter Yard afreitag)4/16/2016 Abandoned crossing. Ws pipe end is open and should be capped.5/12/2015 Abandoned crossing. Needs to be properly abandoned.11/18/2014 Same as last inspection.5/13/2014 Same as last inspection.10/29/2013 Same as last inspection.5/16/2013 Same as last inspection.10/09/2012 No pump on Pier and power lines cut. Apparently abandoned-should be abandoned properly. (W. Wylie - DWR UCIP)

FIELD\_STRUCT\_DESC: \*ABANDONED\* 18-inch steel irrigation pipe (permit records indicate 16-inch pipe) through the levee, 3.7 feet below the crown. Siphon breaker on the waterside (WS) slope. Pump on channel bank on steel structure. (16-inch pipe authorized under Permit No. 1605, 1959 - Schnabel. Aerial 12 KV power line extension for pump authorized under Permit No. 1631, 1959 - Pacific Gas and Electric Company [PG&E]). [Additional Reference(s): DWR Levee Log, 2005]. FS Date: 4/12/2017 9:32:31 AM

# Photo 3 of 3: UCIP\_FA\_2018\_51493\_64700.jpg



Pipe on WS slope with siphon breaker at WS shoulder.

LM Start	1.75	Rating **	М	Issue No.		7	
LM End	2.39	Issue Type +	Ma	Location *		WS	
Category	Suppleme	ental		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item		ACE Erosion S	Survey,	39.1338	87°	39.141757	0
пеш	DRAFT			-121.7495	26°	-121.742939	0
DWR ID	DWR_ST0	010_01_f _ 2018	8_7				

#### Comment Code

#### Inspector Comment

2017 Site ID: WAC 2.1 L

Status: Eroding

2017 Field Notes: Minor new erosion observed.

Site History: 2011 - Whole bank is starting to unravel, with failure from

poor soils.

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

# **Levee Inspection Report By Mile - Fall 2018**

# **Sutter Maintenance Yard Wadsworth Canal**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Wadsworth Canal	Left	4.63	11/06/2018 11/06/2018	Bob Duffey

LM Start	1.76	Rating **	С	Issue No.		23	
LM End	1.76	Issue Type +	Ma	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item	Animal Co	ontrol		39.1339	78°	39.133978	0
пеш				-121.7493	27°	-121.749327	0
DWR ID	DWR_ST00	010_01_f _ 201	7_23				
		Comn	nent Coc	le			
A3 : No roo compact o		le, but rodent rows.	burrows	visible; nee	ed to	backfill and	
		Inspecto	or Comm	ent			
The rodent holes were repaired along the waterside slope.							

No Photos

\* Location

LS: Land Side N/A: Not Applicable WS: Water Side

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

# Levee Inspection Report By Mile - Fall 2018

#### **Sutter Maintenance Yard Wadsworth Canal**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Wadsworth Canal	Left	4.63	11/06/2018 11/06/2018	Bob Duffey

LM Start	1.85	Rating **	М	Issue No.		110
LM End	1.85	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UCI	P Field Study		39.1350	91 °	39.135091°
item				-121.7481	96°	-121.748196°
DWR ID	17063					

# Inspector Comment

Comment Code

FS\_ID:51498 DS\_ID:17063 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/10/2017 Abandoned. 10/12/2016 Abandoned crossing. (DWR Sutter Yard - afreitag)4/19/2016 Abandoned crossing. No noticeable issues to report.5/12/2015 Abandoned crossing. Cap was made and installed on WS open end of pipe.11/18/2014 Same as last inspection.5/13/2014 Cap was made and bolted on to WS open end of pipe.10/29/2013 Same as last inspection. 5/16/2013 Same as last inspection. Steve Beckley is looking into finding pipe owner to properly abandon pipe.10/9/2012 Pipe abandoned. Pipe open and not plugged. Pipe should be removed or abandoned properly. Extensive animal burrowing occuring along pipe alignment. (W. Wylie - DWR UCIP) FIELD\_STRUCT\_DESC: \*ABANDONED\* 14-inch steel irrigation pipe

FIELD\_STRUCT\_DESC: \*ABANDONED\* 14-inch steel irrigation pipe (permit records reference 24-inch corrugated metal in 1939 and existing 18-inch pipe in 1932 through levee, USACE O&M references 15-inch pipe in 1953) through the levee, 5.7 feet below the crown. Siphon breaker located on the landside (LS). Vertical pump located on the waterside (WS). Meter pole located on the WS berm. (Permit authorized existing 18-inch pipe and new installation of pump under Permit No. 572, 1932 - Joaquin). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 135, May 1953, (Station 98+02)].

FS Date: 4/12/2017 9:37:31 AM

LM Start	1.85	Rating **	M	Issue No.	110 (cont)
LM End	1.85	Issue Type +	En	Location *	



Pump missing from steel pier on WS toe.

Photo 2 of 3: UCIP\_FA\_2018\_51498\_64710.jpg



Pipe with siphon breaker plugged on LS shoulder.

\* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating
A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiency
C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

\*\* Rating
A: Acceptable M: N: Not Inspected/Rated M: Ma: Maintenance Deficiency
Ob: Design & System Obsolescence
En: Enforcement

# Levee Inspection Report By Mile - Fall 2018

#### **Sutter Maintenance Yard Wadsworth Canal**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Wadsworth Canal	Left	4.63	11/06/2018 11/06/2018	Bob Duffey

LM Start	1.85	Rating **	M	Issue No.		110 (cont)
LM End	1.85	Issue Type +	En	Location *		
Catagony	Supplemental			GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UCI	DWR UCIP Field Study			1°	39.135091 °
пеш				-121.74819	3°	-121.748196 °
DWR ID	17063					·

Comment Code

Inspector Comment

FS\_ID:51498 DS\_ID:17063 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/10/2017 Abandoned. 10/12/2016 Abandoned crossing. (DWR Sutter Yard - afreitag)4/19/2016 Abandoned crossing. No noticeable issues to report.5/12/2015 Abandoned crossing. Cap was made and installed on WS open end of pipe.11/18/2014 Same as last inspection.5/13/2014 Cap was made and bolted on to WS open end of pipe.10/29/2013 Same as last inspection.5/16/2013 Same as last inspection. Steve Beckley is looking into finding pipe owner to properly abandon pipe.10/9/2012 Pipe abandoned. Pipe open and not plugged. Pipe should be removed or abandoned properly. Extensive animal burrowing occuring along pipe alignment. (W. Wylie - DWR UCIP) FIELD\_STRUCT\_DESC: \*ABANDONED\* 14-inch steel irrigation pipe

(permit records reference 24-inch corrugated metal in 1939 and existing 18-inch pipe in 1932 through levee, USACE O&M references 15-inch pipe in 1953) through the levee, 5.7 feet below the crown. Siphon breaker located on the landside (LS). Vertical pump located on the waterside (WS). Meter pole located on the WS berm. (Permit authorized existing 18-inch pipe and new installation of pump under Permit No. 572, 1932 - Joaquin). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 135, May 1953, (Station 98+02)].

FS Date: 4/12/2017 9:37:31 AM

Photo 3 of 3 : UCIP\_FA\_2018\_51498\_64709.jpg



Extensive burrowing along pipe alignment on WS slope.

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard Wadsworth Canal**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Wadsworth Canal	Left	4.63	11/06/2018 11/06/2018	Bob Duffey

LM Start	1.85	Rating **	U	Issue No.		107		
LM End	1.85	Issue Type +	Ma	Location *		WS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	Erosion / I	Bank Caving		39.1351	10°	39.135110°		
item				-121.748230 °		-121.748230°		
DWR ID DWR_ST0010_01_f _ 2013_107								
	Comment Code							
E2 : Sched	dule repair	of erosion site	e prior to	the next in	spec	ction.		
Inspector Comment								
Repair the erosion under the abandoned pump.								

		CIET ON A BE	100
THE PARTY			The second second
Table Section 1			
	1		1
		Bride MI	280
		MAN AS THE RESIDENCE OF THE PARTY OF THE PAR	Barrie VI
			THE PERSON NAMED IN
Market Const.		<b>多声,</b>	STATE OF THE PARTY
		- 在程度	- 10 Marie 1
PERMANENT.	State of the state	200	and the second
"一个"一个"一个"的一个"一个"的一个"一个"的一个"一个"的一个"一个"的一个"一个"的一个"一个"的一个"一个"的一个"一个"的一个"一个"的一个"一个"		- 1/2	
<b>一种</b>	TO THE STATE OF		10/23/2013
		11000000000000000000000000000000000000	101 531 50 13
	OF LAX	TO A STATE OF	
A STATE OF THE STA		A STATE OF THE STA	

Photo 1 of 3: FA\_2018\_ST0010\_42\_107\_20180905\_00017.jpg

View of the erosion along both sides of the abandoned pump.

# LM Start 1.85 Rating \*\* U Issue No. 107 (cont) LM End 1.85 Issue Type + Ma Location \* WS

Photo 2 of 3: FA\_2018\_ST0010\_42\_107\_20180905\_00018.jpg



View of the erosion along both sides of the abandoned pump.

LM Start	1.85	Rating **	U	Issue No.	107 (cont)
LM End	1.85	Issue Type +	Ma	Location *	WS



View of erosion along both sides of the abandoned pipe.

\* Location
LS: Land Side N/A: Not Applicable
WS: Water Side
CR: Crown

\*\* Rating
A: Acceptable
N: Not Inspected/Rated
M: Minimally Acceptable
C: Corrected
U: Unacceptable
AW: Acceptable but Monitor & Maintain

\*\* Issue Type
Ma: Maintenance Deficiency
Ob: Design & System Obsolescence
En: Enforcement

# **Levee Inspection Report By Mile - Fall 2018**

# **Sutter Maintenance Yard Wadsworth Canal**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Wadsworth Canal	Left	4.63	11/06/2018 11/06/2018	Bob Duffey

LM Start	1.85	Rating **	М	Issue No.		106
LM End	1.85	Issue Type +	Ма	Location *		WS
Catagony	Category Earthen Levee			GPS Latitude/Longitude		
Calegory				Start		End
Itom	Animal Control			39.1351	10°	39.135110°
Item				-121.7482	29°	-121.748229°
DWR ID DWR_ST0010_01_f _ 2013_106						
Comment Code						

A3: No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment



View of the rodent holes under the irrigation pipe.

LM Start	2.43	Rating **	М	Issue No.		6	
LM End	3.30	Issue Type +	Ma	Location *		WS	
Category				GPS Latitude/Longitude			
Calegory				Start		End	
Item		2017 USACE Erosion Survey,			35°	39.153095°	
пеш	DRAFT			-121.74260	)9°	-121.734390°	
DWR ID DWR_ST0010_01_f _ 2018_6							
Comment Code							

#### Inspector Comment

2017 Site ID: WAC 2.4 L

Status: Eroding

2017 Field Notes: Significant new erosion along lower bank.
Site History: 2010 - Over steepened levees, some slumping, reach-wide

problem. 2011 - Still a reach-wide problem.

LM Start	2.43	Rating **	М	Issue No.	6 (cont)
LM End	3.30	Issue Type +	Ма	Location *	WS

#### Photo 1 of 4: FA\_2018\_ST0010\_42\_6\_20180905\_00006.jpg



View of the erosion along the waterside toe.

#### Photo 2 of 4: FA\_2018\_ST0010\_42\_6\_20180905\_00007.jpg



View of the erosion along the waterside toe.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard Wadsworth Canal**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Wadsworth Canal	Left	4.63	11/06/2018 11/06/2018	Bob Duffey

LM Start	2.43	Rating **	М	Issue No.	6 (cont)				
LM End	3.30	Issue Type +	Ма	Location *	WS				
Category	ental	GPS La	tituc	le/Longitude					
Category				Start		End			
Item		CE Erosion S	Survey,	39.14223	5°	39.153095 °			
пеш	DRAFT			-121.74260	9°	-121.734390 °			
DWR ID DWR_ST0010_01_f _ 2018_6									
	Comment Code								

Inspector Comment

2017 Site ID: WAC 2.4 L

Status: Eroding

2017 Field Notes: Significant new erosion along lower bank.

Site History: 2010 - Over steepened levees, some slumping, reach-wide

problem. 2011 - Still a reach-wide problem.

LM Start 2.43		Rating ** M		Issue No.	6 (cont)	
LM End	3.30	Issue Type +	Ma	Location *	WS	

#### Photo 3 of 4: FA\_2018\_ST0010\_42\_6\_20180905\_00008.jpg



View of the erosion along the waterside toe.

#### Photo 4 of 4: FA\_2018\_ST0010\_42\_6\_20180905\_00009.jpg



View of the erosion along the waterside toe.

# Levee Inspection Report By Mile - Fall 2018

#### **Sutter Maintenance Yard Wadsworth Canal**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Wadsworth Canal	Left	4.63	11/06/2018 11/06/2018	Bob Duffey

LM Start	3.04	Rating **	М	Issue No.		111		
LM End	3.04	Issue Type +	En	Location *				
Category	Supplemental				GPS Latitude/Longitude			
Calegory			Start		End			
Item	DWR UCI	P Field Study		39.14954	19°	39.149549°		
item				-121.73640	)8°	-121.736408°		
DWR ID	17065							

#### Inspector Comment

Comment Code

FS\_ID:51500 DS\_ID:17065 EP\_NO: 7209

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/10/2017 Ws pipe end is in good condition. LS pipe end is still deformed and vegetated. (DWR Sutter Yard-AFreitag)10/12/2016 LS inlet is still deformed and being overgrown by vegetation.(DWR Sutter Yard - afreitag)4/19/2016 Crossing appears to be in good condition.5/12/2015 LS inlet still deformed a little but does not affect the crossing function.11/18/2014 Same as

last inspection.5/13/2014 Same as last inspection.10/29/2013 Same as last inspection.5/16/2013 Pipe intake on LS appears to be bent and damaged but that does not appear to be affecting water flow or channel bank.

FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe (permit records indicate 30-inch, USACE O&M pipe replaced with new 30-inch pipe) through the levee, 9 feet below the crown. Flap gate located on the waterside (WS) end. (Original O&M manual crossing was replaced under Permit No. 7209, 1970 - Department of Water Resources [DWR]) [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 135, May 1953, (Station 160+25)]. FS Date: 4/12/2017 9:39:10 AM

LM Start	3.04	Rating **	М	Issue No.	111 (cont)
LM End	3.04	Issue Type +	En	Location *	



36-inch pipe with flapgate on WS slope.

Photo 2 of 3: UCIP FA 2018 51500 64717.jpg



Inlet in weeds on LS toe.

\* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating
A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiency
C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

\*\* Rating
A: Acceptable M: N: Not Inspected/Rated M: Ma: Maintenance Deficiency
Ob: Design & System Obsolescence
En: Enforcement

# Levee Inspection Report By Mile - Fall 2018

#### **Sutter Maintenance Yard Wadsworth Canal**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Wadsworth Canal	Left	4.63	11/06/2018 11/06/2018	Bob Duffey

LM Start	3.04	Rating **	М	Issue No.		111 (cont)
LM End	3.04	Issue Type +	En	Location *		
Category	Supplemental					e/Longitude
Calegory			Start		End	
Item	DWR UCI	IP Field Study		39.14954	9°	39.149549°
пеш			-121.73640	8°	-121.736408°	
DWR ID	17065					

#### Inspector Comment

Comment Code

FS ID:51500 DS\_ID:17065 EP\_NO: 7209

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/10/2017 Ws pipe end is in good condition. LS pipe end is still deformed and vegetated. (DWR Sutter Yard-

AFreitag)10/12/2016 LS inlet is still deformed and being overgrown by vegetation.(DWR Sutter Yard - afreitag)4/19/2016 Crossing appears to be in good condition.5/12/2015 LS inlet still deformed a little but does not affect the crossing function.11/18/2014 Same as last inspection.5/13/2014 Same as last inspection.10/29/2013 Same as last inspection.5/16/2013 Pipe intake on LS appears to be bent and damaged but that does not appear to be affecting water flow or channel bank.

FIELD STRUCT DESC: 36-inch corrugated metal drainage pipe (permit records indicate 30-inch, USACE O&M pipe replaced with new 30-inch pipe) through the levee, 9 feet below the crown. Flap gate located on the waterside (WS) end. (Original O&M manual crossing was replaced under Permit No. 7209, 1970 - Department of Water Resources [DWR]) [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 135, May 1953, (Station 160+25)]. FS Date: 4/12/2017 9:39:10 AM

# Photo 3 of 3: UCIP\_FA\_2018\_51500\_64716.jpg



Pipe inlet heavily shielded by vegetation.

LM Start	3.25	Rating **	Α	Issue No.		24
LM End	3.30	Issue Type +	Ma	Location *		WS
Category	evee	GPS Latitude/Longitude				
Category				Start		End
Item	Erosion /	Bank Caving		39.15228	32 °	39.152925 °
пеш				-121.73458	30°	-121.734275 °
DWR ID	DWR_ST0	010_01_f _ 2018	3_24			

E1: Note and monitor erosion site.

#### Inspector Comment

Comment Code

The waterside channel was repaired by Sutter Maintenance Yard.

#### Photo 1 of 1: FA\_2018\_ST0010\_42\_24\_20181106\_00037.jpg



View of the repaired erosion along the waterside channel.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

# Levee Inspection Report By Mile - Fall 2018

#### **Sutter Maintenance Yard Wadsworth Canal**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Wadsworth Canal	Left	4.63	11/06/2018 11/06/2018	Bob Duffey

LM Start	3.30	Rating **	М	Issue No.		112
LM End	3.30	Issue Type +	En	Location *		
Category	ental	GPS Latitude/Longitude				
Calegory				Start		End
Item	DWR UCI	P Field Study		39.15304	13°	39.153043°
пеш				-121.73424	17°	-121.734247°
DWR ID	23097					

# Comment Code Inspector Comment

FS\_ID:51501 DS\_ID:23097 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/10/2017 Crossing appears to be in good condition. Photos added. (DWR Sutter Yard- AFreitag)10/12/2016 Crossing

appears to be in good condition.(DWR Sutter Yard -

afreitag)5/31/2016 Need photos markers and levee overview (O. Magana)4/19/2016 Crossing appears to be in good condition. No permit on file.5/12/2015 No noticeable issues with crossing but no permit on file for it.11/18/2014 Same as last inspection.5/13/2014 Same as last inspection.10/29/2013 Same as last

inspection.5/16/2013 No known permit for work.

FIELD\_STRUCT\_DESC: 4-inch steel communication line conduit through the levee, 2 feet below the crown. Fiber optics line attached to bottom of downstream side of South Butte Road bridge. Position marked with orange markers. No permit has been identified since crossing was field discovered in 2012.

FS Date: 4/12/2017 9:40:23 AM

LM Start	3.30	Rating **	М	Issue No.	112 (cont)
LM End	3.30	Issue Type +	En	Location *	



Levee overview looking upstream.

#### Photo 2 of 3: UCIP\_FA\_2018\_51501\_76954.jpg



Conduit exiting WS slope and attatching to the downstream side of South Butte Rd bridge.

\* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiency

M: Minimally Acceptable C: Corrected Ob: Design & System Obsolescence

A/W: Acceptable but Monitor & Maintain

\*\* Rating

A: Acceptable M: Not Inspected/Rated M: Maintenance Deficiency Ob: Design & System Obsolescence En: Enforcement

# Levee Inspection Report By Mile - Fall 2018

#### **Sutter Maintenance Yard Wadsworth Canal**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Wadsworth Canal	Left	4.63	11/06/2018 11/06/2018	Bob Duffey

LM Start	3.30	Rating **	М	Issue No.		112 (cont)
LM End	3.30	Issue Type +	En	Location *		
Category	Suppleme	ental	GPS Latitude/Longitude			
Calegory			Start			End
Item	DWR UC	IP Field Study		39.15304	13°	39.153043°
пеш				-121.73424	17°	-121.734247°
DWR ID	23097					

#### Inspector Comment

Comment Code

FS\_ID:51501 DS\_ID:23097 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/10/2017 Crossing appears to be in good condition. Photos added. (DWR Sutter Yard- AFreitag)10/12/2016 Crossing

appears to be in good condition.(DWR Sutter Yard -

afreitag)5/31/2016 Need photos markers and levee overview (O. Magana)4/19/2016 Crossing appears to be in good condition. No permit on file.5/12/2015 No noticeable issues with crossing but no permit on file for it.11/18/2014 Same as last inspection.5/13/2014 Same as last inspection.10/29/2013 Same as last

inspection.5/16/2013 No known permit for work.

FIELD\_STRUCT\_DESC: 4-inch steel communication line conduit through the levee, 2 feet below the crown. Fiber optics line attached to bottom of downstream side of South Butte Road bridge. Position marked with orange markers. No permit has been identified since crossing was field discovered in 2012.

FS Date: 4/12/2017 9:40:23 AM

Photo 3 of 3: UCIP\_FA\_2018\_51501\_76955.jpg



Close up of carsonite marker.

LM Start	3.32	Rating **	М	Issue No.		25	
LM End	4.60	Issue Type +	Ma	Location *		WS	
Category	Suppleme	ental		GPS La	titud	e/Longitude	
Category		Start			End		
Item		CE Erosion S	Survey,	39.1532	96°	39.170973	0
item	DRAFT			-121.7343	04°	-121.726852	0
DWR ID	DWR_ST00	010_01_f _ 2018	3_25				
		Comn	nent Coc	le			

Inspector Comment

2017 Site ID: WAC 4.4 L Status: Eroding New

2017 Field Notes: Significant lower bank erosion and overall slumping.

Site History:

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Fall 2018

#### Sutter Maintenance Yard Wadsworth Canal

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Wadsworth Canal	Left	4.63	11/06/2018 11/06/2018	Bob Duffey

LM Start	3.50	Rating **	М	Issue No.		113			
LM End	3.50	Issue Type +	En	Location *					
Category	Supplemental			Supplemental			GPS La	titud	e/Longitude
Calegory				Start		End			
Item	DWR UCI	P Field Study		39.1557	52°	39.155752°			
пеш				-121.7331	15°	-121.733115°			
DWR ID	17066								

#### Inspector Comment

Comment Code

FS ID:51502 DS\_ID:17066 EP NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

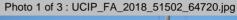
UCIP Comments: 4/10/2017 LS heavily vegetated but nothing appears to have changed with the crossing. LS headwall still silted in and pipe discharges directly into the rice field. (DWR Sutter Yard-

AFreitag)10/12/2016 Crossing appears to be in good condition.4/19/2016 Crossing has not changed since the last inspection. LS headwall is silted in and not being used. LS pipe end discharges into the rice field.5/12/2015 Concrete headwall on LS is completely silted in. LS pipe end is located near the edge of rice field. No issues seen on WS.11/18/2014 Same as last

inspection.5/13/2014 Same as last inspection.10/29/2013 Concrete headwall is silted in and appears to be abandoned. Discharge end of pipe is approx. 100ft. from LS toe on the edge of the rice field.5/16/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 24-inch steel irrigation pipe (USACE O&M refers to 24-inch corrugated metal pipe) through the levee, 11 feet below the crown. Slide gate in 4-foot by 6-foot concrete distribution box located at the waterside (WS) toe. (not found in 2012) Vertical pump mounted on a steel structure in channel. Service pole on the berm with 18-inch standpipe located on the WS toe. Concrete ""U"" shaped headwall located on the landside (LS) toe. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 135, May 1953, (Station 184+87)].

FS Date: 4/12/2017 9:44:02 AM





Pump, Pipe, walkway, power pole, and standpipe on WS toe.

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard Wadsworth Canal**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Wadsworth Canal	Left	4.63	11/06/2018 11/06/2018	Bob Duffey

LM Start	3.50	Rating **	М	Issue No.		113 (cont)
LM End	3.50	Issue Type +	En	Location *		
Category			GPS La	titud	e/Longitude	
Calegory	egory			Start		End
Item	DWR UCI	P Field Study		39.1557	52 °	39.155752°
пеш				-121.7331	15°	-121.733115°
DWR ID	17066					·

#### Inspector Comment

Comment Code

FS\_ID:51502 DS\_ID:17066 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/10/2017 LS heavily vegetated but nothing appears to have changed with the crossing. LS headwall still silted in and pipe discharges directly into the rice field. (DWR Sutter Yard-

AFreitag)10/12/2016 Crossing appears to be in good condition.4/19/2016 Crossing has not changed since the last inspection. LS headwall is silted in and not being used. LS pipe end discharges into the rice field.5/12/2015 Concrete headwall on LS is completely silted in. LS pipe end is located near the edge of rice field. No issues seen on WS.11/18/2014 Same as last

inspection.5/13/2014 Same as last inspection.10/29/2013 Concrete headwall is silted in and appears to be abandoned. Discharge end of pipe is approx. 100ft. from LS toe on the edge of the rice field.5/16/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 24-inch steel irrigation pipe (USACE O&M refers to 24-inch corrugated metal pipe) through the levee, 11 feet below the crown. Slide gate in 4-foot by 6-foot concrete distribution box located at the waterside (WS) toe. (not found in 2012) Vertical pump mounted on a steel structure in channel. Service pole on the berm with 18-inch standpipe located on the WS toe. Concrete ""U"" shaped headwall located on the landside (LS) toe. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 135, May 1953, (Station 184+87)].

FS Date: 4/12/2017 9:44:02 AM

Photo 2 of 3: UCIP\_FA\_2018\_51502\_64719.jpg



Concrete U shaped headwall on LS toe under tree.

# Levee Inspection Report By Mile - Fall 2018

#### **Sutter Maintenance Yard Wadsworth Canal**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Wadsworth Canal	Left	4.63	11/06/2018 11/06/2018	Bob Duffey

LM Start	3.50	Rating **	М	Issue No.		113 (cont)
LM End	3.50	Issue Type +	En	Location *		
Category			GPS La	titud	e/Longitude	
Calegory	egory			Start		End
Item	DWR UCI	P Field Study		39.1557	52 °	39.155752°
пеш				-121.7331	15°	-121.733115°
DWR ID	17066					·

# Inspector Comment

Comment Code

FS\_ID:51502 DS\_ID:17066 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/10/2017 LS heavily vegetated but nothing appears to have changed with the crossing. LS headwall still silted in and pipe discharges directly into the rice field. (DWR Sutter Yard-

discharges directly into the rice field. (DWR Sutter Yard-AFreitag)10/12/2016 Crossing appears to be in good condition.4/19/2016 Crossing has not changed since the last inspection. LS headwall is silted in and not being used. LS pipe end discharges into the rice field.5/12/2015 Concrete headwall on LS is completely silted in. LS pipe end is located near the edge of rice field. No issues seen on WS.11/18/2014 Same as last

inspection.5/13/2014 Same as last inspection.10/29/2013 Concrete headwall is silted in and appears to be abandoned. Discharge end of pipe is approx. 100ft. from LS toe on the edge of the rice field.5/16/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 24-inch steel irrigation pipe (USACE O&M refers to 24-inch corrugated metal pipe) through the levee, 11 feet below the crown. Slide gate in 4-foot by 6-foot concrete distribution box located at the waterside (WS) toe. (not found in 2012) Vertical pump mounted on a steel structure in channel. Service pole on the berm with 18-inch standpipe located on the WS toe. Concrete ""U"" shaped headwall located on the landside (LS) toe. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 135, May 1953, (Station 184+87)].

FS Date: 4/12/2017 9:44:02 AM

Photo 3 of 3: UCIP\_FA\_2018\_51502\_64721.jpg



View of LS headwall silted in.

# **Levee Inspection Report By Mile - Fall 2018**

# **Sutter Maintenance Yard Wadsworth Canal**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Wadsworth Canal	Left	4.63	11/06/2018 11/06/2018	Bob Duffey

LM Start	3.53	Rating **	A/W	Issue No.		3
LM End	3.56	Issue Type +	Ma	Location *	WS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory				Start		End
Item	Erosion /	Erosion / Bank Caving			225°	39.156639°
пеш					30°	-121.732755 °
DWR ID DWR_ST0010_01_s _ 2012_3						
		Comn	nent Cod	de		
E1 : Note a	and monito	or erosion site				
		Inspecto	or Comm	nent		
Monitor the erosion along the waterside toe.						



View of the erosion along the waterside toe.

LM Start	3.65	Rating **	A/W	Issue No.		4	
LM End	3.65	Issue Type +	Ма	Location *	WS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Category				Start		End	
Item	Erosion / I	Bank Caving		39.1578	861°	39.157861 °	
пеш				-121.732238 °		-121.732238°	
DWR ID DWR_ST0010_01_s _ 2012_4							
Comment Code							
E1: Note a	and monito	or erosion site					
		Inspecto	or Comm	nent			
Monitor the erosion along the waterside toe.							

LM Start	3.65	Rating **	A/W	Issue No.	4 (cont)
LM End	3.65	Issue Type +	Ma	Location *	WS

#### Photo 1 of 2: FA\_2018\_ST0010\_42\_4\_20180905\_00002.jpg



View of the erosion along the waterside toe of the levee.

Photo 2 of 2: FA\_2018\_ST0010\_42\_4\_20180905\_00003.jpg



View of the erosion along the waterside toe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

# **Levee Inspection Report By Mile - Fall 2018**

# **Sutter Maintenance Yard Wadsworth Canal**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Wadsworth Canal	Left	4.63	11/06/2018 11/06/2018	Bob Duffey

LM Start	3.84	Rating **	A/W	Issue No.		17	
LM End	3.96	Issue Type +	Ma	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item	Erosion / I	Bank Caving		39.1604	42 °	39.162235 °	
item				-121.731067°		-121.730912°	
DWR ID	DWR ID DWR_ST0010_01_f _ 2014_17						
		Comn	nent Cod	de			
E1 : Note a	and monito	r erosion site					
		Inspecto	or Comm	nent			
Monitor the erosion along the waterside toe.							
inionitor tric	0.0000110	iong ino wate	10.00 100				

Photo 1 of 1: FA\_2018\_ST0010\_42\_17\_20180905\_00010.jpg



View of the erosion along the waterside toe.

LM Start	4.08	Rating **	Α	Issue No.		21			
LM End	4.08	Issue Type +	Ма	Location *		LS			
Category	Earthen Levee			GPS Latitude/Longitude					
Category			Start		End				
Item	Vegetation			39.16379	92 °	39.163792°			
item			-121.72973	33 °	-121.729733°				
DWR ID DWR_ST0010_01_f _ 2018_21									
	Comment Code								

#### Comment Code

V1: Control annual grass and weeds on the levee slopes and easements.

#### Inspector Comment

The vegetation was removed from both slopes.

#### Photo 1 of 1: FA\_2018\_ST0010\_42\_21\_20181106\_00036.jpg



View of no vegetation on both slopes.

LM Start	4.23	Rating **	A/W	Issue No.		5	
LM End	4.23	Issue Type +	Ма	Location *		WS	
Category	Earthen Levee			GPS Latitude/Longitude			
Category				Start		End	
Item	Erosion / Bank Caving			39.165845°		39.165845°	
item				-121.7288	77 °	-121.728877 °	
DWR ID	DWR_ST0	010_01_s _ 201	2_5				
Comment Code							
E1: Note a	and monito	or erosion site					

#### Inspector Comment

Monitor the erosion along the waterside toe.

# Photo 1 of 2: FA\_2018\_ST0010\_42\_5\_20180905\_00004.jpg



View of the erosion along the waterside toe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard Wadsworth Canal**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Wadsworth Canal	Left	4.63	11/06/2018 11/06/2018	Bob Duffey

LM Start	4.23	Rating **	A/W	Issue No.		5 (cont)
LM End	4.23	Issue Type +	Ма	Location *		WS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Category				Start		End
Item	Erosion / I	Bank Caving		39.1658	45°	39.165845°
пеш				-121.728877 °		-121.728877°
DWR ID DWR_ST0010_01_s _ 2012_5						
		Comn	nent Cod	de		
E1: Note a	and monito	or erosion site				
		Inspecto	or Comm	nent		
Monitor the erosion along the waterside toe.						

Photo 2 of 2 : FA\_2018\_ST0010\_42\_5\_20180905\_00005.jpg



View of the erosion along the waterside toe.

## **Unit Cover Sheet**

Fall 2018 Levee Inspection Results

### **Sutter Maintenance Yard Wadsworth Canal**

Waterway	Bank	Unit Miles
Unit No. 02 Wadsworth Canal	Right	4.60

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			U	
Date of Inspection	3/29/2018 - 3/29/2018		11/6/2018 - 11/6/2018	
DWR Inspector	Bob Duffey		Bob Duffey	
Accompanied By	Steve Beckley Sutter Maintenance Yard		Steve Beckley Sutter Maintenance Yard	

#### Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

#### http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

# Levee Inspection Report By Mile - Fall 2018

#### **Sutter Maintenance Yard Wadsworth Canal**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Wadsworth Canal	Right	4.60	11/06/2018 11/06/2018	Bob Duffey

LM Start	0.02	Rating **	М	Issue No.		24
LM End	0.02	Issue Type +	En	Location *		
Category	ental	GPS Latitude/Longitude				
Calegory	Category					End
Item	DWR UCI	P Field Study		39.1143	72°	39.114372°
пеш	em				63°	-121.769263°
DWR ID	17080					

No Photos

#### Inspector Comment

Comment Code

FS\_ID:52633 DS\_ID:17080 EP\_NO: 5296

Repair Type: Non-Urgent Crossing Status: Not Found

UCIP Comments: 4/10/2017 Unable to locate. (DWR Sutter Yard-AFreitag)10/12/2016 Unable to locate. (DWR Sutter Yard - afreitag)4/19/2016 Unable to locate.5/12/2015 Unable to locate.11/18/2014 Same as last inspection.5/13/2014 Same as last inspection.10/29/2013 Same as last inspection.5/16/2013 Same as last inspection.10/9/2012 Unable to locate any signage. Call owner to determine disposition of pipeline. (W. Wylie - DWR UCIP) FIELD\_STRUCT\_DESC: 3.5-inch steel gas line through the levee, 3 feet below the crown. Gas line goes through both levees and Wadsworth Canal. (Permit No. 5296, 1966 - Atlantic Oil Company). [Additional Reference(s): DWR Levee Log, 2005].

FS Date: 4/12/2017 9:46:00 AM

LM Start	0.24	Rating **	М	Issue No.		17	
LM End	0.24	Issue Type +	Ма	Location *		WS	
Category	evee	GPS Latitude/Longitude					
Calegory	Category					End	
Item	Animal Control				13°	39.116913°	
item				-121.7667	68°	-121.766768°	
DWR ID	DWR_ST0	010_02_f _ 2018	8_17				
Comment Code							
A3 : No rodents visible, but rodent burrows visible; need to backfill and							

A3: No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

#### Inspector Comment

Repair the rodent hole along the waterside slope.

#### Photo 1 of 1: FA\_2018\_ST0010\_43\_17\_20181008\_00035.jpg



View of the rodent hole along the waterside slope.

# Levee Inspection Report By Mile - Fall 2018

#### **Sutter Maintenance Yard Wadsworth Canal**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Wadsworth Canal	Right	4.60	11/06/2018 11/06/2018	Bob Duffey

LM Start	1.16	Rating **	М	Issue No.		25
LM End	1.16	Issue Type +	En	Location *		
Category	ental	GPS Latitude/Longitude				
Calegory	Category					End
Item	DWR UCI	IP Field Study		39.12748	7°	39.127487°
пеш				-121.75648	5 °	-121.756485 °
DWR ID	17069					·

#### Inspector Comment

Comment Code

FS\_ID:51506 DS\_ID:17069 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/10/2017 Abanoned crossing with heavy rodent activity around it. Needs to be removed. (DWR Sutter Yard-AFreitag)10/12/2016 Abandoned crossing.(DWR Sutter Yard afreitag)4/19/2016 Abandoned crossing. Rodent activity still present on WS slope.5/12/2015 Abandoned crossing. Signs of rodent activity on both sides of levee.11/18/2014 Same as last inspection.5/13/2014 Same as last inspection.10/29/2013 Same as last inspection.5/16/2013 Same as last inspection.10/9/2012 Pipe appears improperly abandoned. No motor present, electrical equipment is stripped. Heavy rodent activity along pipe WS and LS. Pipe needs to be removed or properly abandoned. (W. Wylie - DWR UCIP) FIELD\_STRUCT\_DESC: \*ABANDONED\* 10-inch steel irrigation pipe through the levee, 4.8 feet below the crown. Pump mounted on concrete pad near canal bank located on the waterside (WS). Service pole located on the berm. 36-inch concrete standpipe located on the landside (LS) toe. (Permit No. 945, 1944 - Becker). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 135, May 1953, (Station 61+10)]. FS Date: 4/12/2017 9:47:25 AM

LM Start	1.16	Rating **	М	Issue No.	25 (cont)
LM End	1.16	Issue Type +	En	Location *	



Pipe and Standpipe on LS toe.

#### Photo 2 of 3: UCIP\_FA\_2018\_51506\_64727.jpg



Pipe and pump facilities on WS slope.

\* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating
A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiency
C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

\*\* Rating
A: Acceptable M: N: Not Inspected/Rated M: Ma: Maintenance Deficiency
Ob: Design & System Obsolescence
En: Enforcement

# Levee Inspection Report By Mile - Fall 2018

#### **Sutter Maintenance Yard Wadsworth Canal**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Wadsworth Canal	Right	4.60	11/06/2018 11/06/2018	Bob Duffey

LM Start	1.16	Rating **	М	Issue No.		25 (cont)
LM End	1.16	Issue Type +	En	Location *		
Category				GPS Latitude/Longitude		
Calegory	Category					End
Item	DWR UCI	P Field Study		39.1274	87°	39.127487°
пеш				-121.75648	35°	-121.756485 °
DWR ID	17069					

# Comment Code

#### Inspector Comment

FS\_ID:51506 DS\_ID:17069 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

FS Date: 4/12/2017 9:47:25 AM

UCIP Comments: 4/10/2017 Abanoned crossing with heavy rodent activity around it. Needs to be removed. (DWR Sutter Yard-AFreitag)10/12/2016 Abandoned crossing.(DWR Sutter Yard afreitag)4/19/2016 Abandoned crossing. Rodent activity still present on WS slope.5/12/2015 Abandoned crossing. Signs of rodent activity on both sides of levee.11/18/2014 Same as last inspection.5/13/2014 Same as last inspection.10/29/2013 Same as last inspection.5/16/2013 Same as last inspection.10/9/2012 Pipe appears improperly abandoned. No motor present, electrical equipment is stripped. Heavy rodent activity along pipe WS and LS. Pipe needs to be removed or properly abandoned. (W. Wylie - DWR UCIP) FIELD\_STRUCT\_DESC: \*ABANDONED\* 10-inch steel irrigation pipe through the levee, 4.8 feet below the crown. Pump mounted on concrete pad near canal bank located on the waterside (WS). Service pole located on the berm. 36-inch concrete standpipe located on the landside (LS) toe. (Permit No. 945, 1944 - Becker). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 135, May 1953, (Station 61+10)].

# Photo 3 of 3: UCIP\_FA\_2018\_51506\_64726.jpg

Heavy rodent activity along pipe, both sides.

LM Start	1.16	Rating **	U	Issue No.	19		
LM End	1.16	Issue Type +	Ma	Location *	WS		
Category	evee	GPS Latitude/Longitude					
Calegory	Category					End	
Item	Animal Co	ontrol		39.1275	27°	39.127527°	
пеш				-121.75649	93°	-121.756493°	
DWR ID DWR_ST0010_02_f _ 2016_19							
Comment Code							

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

#### Inspector Comment

Repair the rodent holes along the waterside slope.

#### Photo 1 of 1: FA\_2018\_ST0010\_43\_19\_20180905\_00013.jpg



View of the rodent holes along the waterside slope.

\* Location
LS: Land Side N/A: Not Applicable
WS: Water Side
CR: Crown

\*\* Rating
A: Acceptable
N: Not Inspected/Rated
M: Minimally Acceptable
C: Corrected
D: Unacceptable
AW: Acceptable
AW: Acceptable but Monitor & Maintain

\*\* Rating
A: Issue Type
Ma: Maintenance Deficiency
Ob: Design & System Obsolescence
En: Enforcement

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard Wadsworth Canal**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Wadsworth Canal	Right	4.60	11/06/2018 11/06/2018	Bob Duffey

LM Start	1.71	Rating **	М	Issue No.		23
LM End	1.71	Issue Type +	Ма	Location *		WS
Category	evee	GPS La	atitud	e/Longitude		
Category				Start		End
Item	Animal Control			39.1339	12°	39.133912°
пеш				-121.7502	58°	-121.750258°
DWR ID	DWR_ST0	010_02_f _ 2018	3_23			

#### Comment Code

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

#### Inspector Comment

Repair the rodent holes along the waterside slope.

#### Photo 1 of 1: FA\_2018\_ST0010\_43\_23\_20181106\_00040.jpg



View of the rodent holes along the waterside slope.

LM Start	1.74	Rating **	М	Issue No.		10	
LM End	2.37	Issue Type +	Ma	Location *		WS	
Category	Supplemental			GPS La	titud	le/Longitude	
Calegory				Start		End	
Item	2017 USACE Erosion Survey, DRAFT			39.1340	64 °	39.141814	0
item				-121.7497	81 °	-121.743260	0
DWR ID	DWR_ST0010_02_f _ 2018_10						
		_					

#### Comment Code

#### Inspector Comment

2017 Site ID: WAC 2.1 R

Status: Eroding

2017 Field Notes: Minor new erosion observed.

Site History: 2011 - Whole bank is starting to unravel, with failure from

poor soils.

No	Photos	

LM Start	1.75	Rating **	М	Issue No.		20		
LM End	1.75	Issue Type +	Ma	Location *		WS		
Category	Earthen L	GPS Latitude/Longitude						
Calegory				Start		End		
Itom	Slope Stability			39.1343	78°	39.134378°		
Item				-121.7498	03 °	-121.749803 °		
DWR ID	DWR_ST0010_02_f _ 2016_20							
Comment Code								

# S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.

#### Inspector Comment

Ramp is causing depression in the levee slope.

# Photo 1 of 1 : FA\_2018\_ST0010\_43\_20\_20180905\_00014.jpg



View of the ramp encroaching into the levee.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard Wadsworth Canal**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Wadsworth Canal	Right	4.60	11/06/2018 11/06/2018	Bob Duffey

4 = 0	D-4i **		Innua Na	I				
1.76	Rating **	M	Issue No.		11			
1.76	Issue Type +	Ma	Location *		LS			
Earthen L	evee		GPS La	atitud	e/Longitude			
			Start		End			
Animal Control			39.1344	90°	39.134490°			
			-121.749716 °		-121.749716°			
DWR_ST00	010_02_f _ 2012	2_11						
	Comn	nent Cod	de					
	,	burrows	visible; ne	ed to	backfill and			
	Inspecto	or Comm	nent					
rodent hol	e.							
•								
	Earthen L  Animal Co  DWR_STOO  dents visib r grout bur	1.76 Issue Type + Earthen Levee Animal Control  DWR_ST0010_02_f _ 2012 Comn dents visible, but rodent r grout burrows.	1.76 Issue Type + Ma  Earthen Levee  Animal Control  DWR_ST0010_02_f_2012_11  Comment Codents visible, but rodent burrows or grout burrows.  Inspector Comment	1.76 Issue Type + Ma Location *  Earthen Levee	1.76 Issue Type + Ma Location *  Earthen Levee GPS Latitud Start  Animal Control 39.134490 ° -121.749716 °  DWR_ST0010_02_f _ 2012_11 Comment Code dents visible, but rodent burrows visible; need to r grout burrows.  Inspector Comment			

LM Start	1.76	Rating **	М	Issue No.	11 (cont)
I M End	1 76	Issue Type +	Ma	Location *	LS



View of the rodent holes above the irrigation pipe.

Photo 2 of 2: FA\_2018\_ST0010\_43\_11\_20180905\_00012.jpg



View of the rodent hole above the irrigation pipe.

# Levee Inspection Report By Mile - Fall 2018

#### **Sutter Maintenance Yard Wadsworth Canal**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Wadsworth Canal	Right	4.60	11/06/2018 11/06/2018	Bob Duffey

LM Start	1.76	Rating **	М	Issue No.	26			
LM End	1.76	Issue Type +	En	Location *				
Category				GPS Latitude/Longitude				
Calegory			Start		End			
ltom	ltem DWR UCIP Field Study			39.134499°		39.134499 °		
пеш				-121.7497	12°	-121.749712°		
DWR ID	17082							
Comment Code								

#### Inspector Comment

FS\_ID:51512 DS\_ID:17082 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/10/2017 Abandoned crossing. Pipe measures to

be 16" on both sides of levee. (DWR Sutter Yard-

AFreitag)10/12/2016 Abandoned crossing. Minor rodent activity near by.(DWR Sutter Yard - afreitag)4/19/2016 Crossing appears abandoned. Minor rodent activity under pipe on LS slope.5/12/2015 Abandoned crossing that needs to be properly abandoned. Rodent

activity near LS pipe.11/18/2014 Same as last

inspection.5/13/2014 Same as last inspection.10/29/2013 Same as last inspection.5/16/2013 Same as last inspection.10/9/2012 Heavy rodent activity along LS alignment of pipe. No pump on structure and it appears to be abandoned. Should be abandoned properly. (W. Wylie - DWR UCIP)

FIELD\_STRUCT\_DESC: \*ABANDONED\* 16-inch steel irrigation pipe through the levee, 4.4 feet below the crown. Pump mounted on a timber structure located on the waterside (WS). Siphon breaker located on the landside (LS) slope. 48-inch concrete standpipe located on the LS berm (not found in 2012). (Permit No. 1104, 1946 - Muns). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 135, May 1953, (Station 93+50), listed as a 12-inch pipe]. FS Date: 4/12/2017 9:55:14 AM

LM Start	1.76	Rating **	M	Issue No.	26 (cont)
LM End	1.76	Issue Type +	En	Location *	





Pipe on LS showing rodent activity.

#### Photo 2 of 3: UCIP\_FA\_2018\_51512\_64735.jpg



Pipe on LS showing rodent activity.

\* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating
A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiency
C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

\*\* Rating
A: Acceptable M: N: Not Inspected/Rated M: Ma: Maintenance Deficiency
Ob: Design & System Obsolescence
En: Enforcement

# Levee Inspection Report By Mile - Fall 2018

#### **Sutter Maintenance Yard Wadsworth Canal**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Wadsworth Canal	Right	4.60	11/06/2018 11/06/2018	Bob Duffey

LM Start	1.76	Rating **	М	Issue No.		26 (cont)	
LM End	1.76	Issue Type +	En	Location *			
Category	ental		GPS Latitude/Longitude				
Calegory		Start		End			
Item	DWR UCIP Field Study			39.13449	99°	39.134499	٥
item				-121.7497	12°	-121.749712	٥
DWR ID	17082					·	

#### Inspector Comment

Comment Code

FS\_ID:51512 DS\_ID:17082 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/10/2017 Abandoned crossing. Pipe measures to

be 16" on both sides of levee. (DWR Sutter Yard-

AFreitag)10/12/2016 Abandoned crossing. Minor rodent activity near by.(DWR Sutter Yard - afreitag)4/19/2016 Crossing appears abandoned. Minor rodent activity under pipe on LS slope.5/12/2015 Abandoned crossing that needs to be properly abandoned. Rodent

activity near LS pipe.11/18/2014 Same as last

inspection.5/13/2014 Same as last inspection.10/29/2013 Same as last inspection.5/16/2013 Same as last inspection.10/9/2012 Heavy rodent activity along LS alignment of pipe. No pump on structure and it appears to be abandoned. Should be abandoned properly. (W. Wylie - DWR UCIP)

FIELD\_STRUCT\_DESC: \*ABANDONED\* 16-inch steel irrigation pipe through the levee, 4.4 feet below the crown. Pump mounted on a timber structure located on the waterside (WS). Siphon breaker located on the landside (LS) slope. 48-inch concrete standpipe located on the LS berm (not found in 2012). (Permit No. 1104, 1946 - Muns). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 135, May 1953, (Station 93+50), listed as a 12-inch pipe]. FS Date: 4/12/2017 9:55:14 AM

Photo 3 of 3: UCIP\_FA\_2018\_51512\_64734.jpg



Pipe on left without pump.

LM Start	2.41	Rating **	М	Issue No.		8
LM End	3.28	Issue Type +	Ма	Location *		WS
Category	Suppleme	ental		GPS La	atitud	e/Longitude
Category				Start		End
Item		CE Erosion S	Survey,	39.1422	54°	39.153150°
пеш	DRAFT			-121.7428	47°	-121.734611 °
DWR ID	DWR_ST0	010_02_f _ 2018	3_8			

#### Inspector Comment

Comment Code

2017 Site ID: WAC 2.4 R

Status: Eroding

2017 Field Notes: Significant new erosion along lower bank.

Site History: 2010 - Over steepened levees, some slumping, reach-wide

problem. 2011 - Still a reach-wide problem.

#### Photo 1 of 2 : FA\_2018\_ST0010\_43\_8\_20180905\_00007.jpg



View of erosion along the waterside toe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Fall 2018

#### **Sutter Maintenance Yard Wadsworth Canal**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Wadsworth Canal	Right	4.60	11/06/2018 11/06/2018	Bob Duffey

LM Start	2.41	Rating **	М	Issue No.		8 (cont)
LM End	3.28	Issue Type +	Ма	Location *		WS
Category	Suppleme	ental		GPS Latitude/Longitude		
Calegory				Start		End
Item		CE Erosion S	Survey,	39.1422	54°	39.153150°
item	DRAFT		-121.7428	47 °	-121.734611°	
DWR ID	DWR_ST0	010_02_f _ 2018	3_8			

#### Inspector Comment

Comment Code

2017 Site ID: WAC 2.4 R

Status: Eroding

2017 Field Notes: Significant new erosion along lower bank.

Site History: 2010 - Over steepened levees, some slumping, reach-wide

problem. 2011 - Still a reach-wide problem.



View of the erosion along the landside toe.

LM Start	2.95	Rating **	М	Issue No.		21	
LM End	2.95	Issue Type +	Ma	Location *		WS	
Category	Earthen L	evee		GPS Latitude/Longitude			
Category				Start		End	
Item	Slope Sta	bility		39.1489	38°	39.148938°	
пеш				-121.7376	20°	-121.737620°	
DWR ID	DWR_ST0	010_02_f _ 2010	6_21				

#### Comment Code

S3: Repair the levee slope damaged by vehicle traffic and prevent access where possible.

#### Inspector Comment

Ramp is causing depression in the levee slope.

#### Photo 1 of 1: FA\_2018\_ST0010\_43\_21\_20180905\_00015.jpg



View of the ramp encroaching into the levee.

Photo 1 of 2: FA\_2018\_ST0010\_43\_22\_20180905\_00016.jpg

LM Start	2.95	Rating **	M	Issue No.		22		
LM End	2.95	Issue Type +	Ob	Location *	LS			
Category	Earthen L	evee		GPS La	atitud	le/Longitude		
Category				Start		End		
Item	Cracking				38°	39.148938°		
пеш				-121.7376	20°	-121.737620°		
DWR ID	DWR_ST0	010_02_f _ 2010	6_22					
	Comment Code							
CR1: Monitor and have inspected by geotechnical engineer.								

#### Inspector Comment

Longitudinal cracks caused by fat clay.





\* Location

N/A: Not Applicable LS: Land Side

WS: Water Side CR : Crown

: Acceptable : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated

C : Corrected

+ Issue Type

Ma : Maintenance Deficiency Ob : Design & System Obsolescence

A/W : Acceptable but Monitor & Maintain En: Enforcement

# Levee Inspection Report By Mile - Fall 2018

#### **Sutter Maintenance Yard Wadsworth Canal**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Wadsworth Canal	Right	4.60	11/06/2018 11/06/2018	Bob Duffey

LM Start	2.95	Rating **	М	Issue No.		22 (cont)	
LM End	2.95	Issue Type +	Ob	Location *		LS	
0-1	Earthen L	evee		GPS La	atitud	le/Longitude	
Category				Start		End	
Item	Cracking			39.1489	38°	39.148938°	
пеш				-121.737620 °		-121.737620°	
DWR ID	DWR_ST00	010_02_f _ 2010	6_22				
		Comn	nent Cod	de			
CR1: Mon	itor and ha	ave inspected	by geote	echnical en	gine	er.	
Inspector Comment							
Longitudin	Longitudinal cracks caused by fat clay.						



View of the longitudinal cracks along the landside slope.

LM Start	3.00	Rating **	М	Issue No.		27	
LM End	3.00	Issue Type +	En	Location *			
Category	ental	GPS La	tituc	le/Longitude			
Calegory			Start		End		
Item	DWR UCI	P Field Study		39.14956	61 °	39.149561 °	
пеш				-121.73708	30°	-121.737080 °	
DWR ID 17077							
Comment Code							

#### Inspector Comment

FS\_ID:51515 DS\_ID:17077 EP\_NO: 7209

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/10/2017 Tree still present and a problem at the WS pipe outlet. LS inlet is still vegetated. (DWR Sutter Yard-AFreitag)10/12/2016 Tree at the WS pipe end is still an issue and needs to be cut away. LS inlet is also being overgrown with vegetation.(DWR Sutter Yard - afreitag)4/19/2016 Tree at WS pipe end needs to be trimmed back and/or removed. 5/12/2015 Tree growing near WS pipe end is getting too big and will affect the crossing. It needs to be cut back or removed.11/18/2014 Same as last inspection.5/13/2014 Same as last inspection.10/29/2013 Same as last inspection.5/16/2013 Same as last inspection. FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe (permit records indicate 30-inch pipe, O&M pipe replaced with new 30inch pipe) through the levee, 14 feet below the crown. Flap gate located on the waterside (WS) end. (Original O&M manual crossing was replaced under Permit No. 7209, 1970 - Department of Water Resources [DWR]). [Additional Reference(s): DWR Levee Log. 2005. USACE Sacramento O&M Manual 135, May 1953, (Station 158+35)]. FS Date: 4/12/2017 10:16:27 AM

# Photo 1 of 3: UCIP\_FA\_2018\_51515\_64744.jpg



Bush camoflauging outlet of pipe on WS slope.

# Levee Inspection Report By Mile - Fall 2018

#### **Sutter Maintenance Yard Wadsworth Canal**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Wadsworth Canal	Right	4.60	11/06/2018 11/06/2018	Bob Duffey

LM Start	3.00	Rating **	М	Issue No.		27 (cont)
LM End	3.00	Issue Type +	En	Location *		
Category	Suppleme	GPS Latitude/Longitude				
Calegory			Start		End	
Item	DWR UCI	P Field Study		39.14956	61 °	39.149561 °
пеш				-121.73708	30°	-121.737080 °
DWR ID	17077					

# Comment Code

#### Inspector Comment

FS\_ID:51515 DS\_ID:17077 EP\_NO: 7209

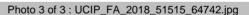
Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/10/2017 Tree still present and a problem at the WS pipe outlet. LS inlet is still vegetated. (DWR Sutter Yard-AFreitag)10/12/2016 Tree at the WS pipe end is still an issue and needs to be cut away. LS inlet is also being overgrown with vegetation.(DWR Sutter Yard - afreitag)4/19/2016 Tree at WS pipe end needs to be trimmed back and/or removed. 5/12/2015 Tree growing near WS pipe end is getting too big and will affect the crossing. It needs to be cut back or removed.11/18/2014 Same as last inspection.5/13/2014 Same as last inspection.10/29/2013 Same as last inspection.5/16/2013 Same as last inspection. FIELD STRUCT DESC: 36-inch corrugated metal drainage pipe (permit records indicate 30-inch pipe, O&M pipe replaced with new 30inch pipe) through the levee. 14 feet below the crown. Flap gate located on the waterside (WS) end. (Original O&M manual crossing was replaced under Permit No. 7209, 1970 - Department of Water Resources [DWR]). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 135, May 1953, (Station 158+35)]. FS Date: 4/12/2017 10:16:27 AM

LM Start	3.00	Rating **	М	Issue No.	27 (cont)
LM End	3.00	Issue Type +	En	Location *	



Heavy vegetation at LS inlet at channel.





Pipe and flap gate at WS outlet.

\* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiency

M: Minimally Acceptable C: Corrected Ob: Design & System Obsolescence

U: Unacceptable A/W: Acceptable but Monitor & Maintain En: Enforcement

# Levee Inspection Report By Mile - Fall 2018

#### **Sutter Maintenance Yard Wadsworth Canal**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Wadsworth Canal	Right	4.60	11/06/2018 11/06/2018	Bob Duffey

LM Start	3.24	Rating **	Α	Issue No.		18				
LM End	3.27	Issue Type +	Ma	Location *		WS				
Category Earthen Levee				GPS La	atitud	e/Longitude				
Category				Start		End				
Item	Erosion / I	Bank Caving		39.1525	60°	39.153087°				
пеш				-121.735032 °		-121.734822 °				
DWR ID	DWR_ST00	010_02_f _ 2018	8_18							
		Comn	nent Cod	de						
E1: Note a	and monito	or erosion site								
Inspector Comment										
The erosion along the waterside channel was repaired.										



View of the repaired erosion along the waterside channel.

LM Start	3.28	Rating **	М	Issue No.		28			
LM End	3.28	Issue Type +	En	Location *					
Category				GPS La	atitud	le/Longitude			
Calegory				Start		End			
Item	DWR UCI	P Field Study		39.1531	72°	39.153172°			
пеш			-121.7347	41 °	-121.734741 °				
DWR ID	23098								
Comment Code									

# Inspector Comment

FS\_ID:51516 DS\_ID:23098 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/10/2017 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)10/12/2016 Crossing appears to be in good condition. (DWR Sutter Yard - afreitag)5/27/2016 Need photos of markers and levee overview. (O. Magana)4/19/2016 Crossing appears to be in good condition. No permit on file.5/12/2015 Crossing is in good condition but does not have a permit on file for it.11/18/2014 Same as last inspection.5/13/2014 Same as last inspection.10/29/2013 Same as last inspection.5/16/2013 No known permit for work.

FIELD\_STRUCT\_DESC: 4-inch steel communication conduit through the levee, 2 feet below the crown. Fiber optics line attached to bottom of downstream side of South Butte Road bridge. Position marked with orange markers on both the waterside (WS) and landside (LS). No permit has been identified since crossing was field discovered in 2012. FS Date: 4/12/2017 10:18:34 AM

#### Photo 1 of 3: UCIP\_FA\_2018\_51516\_76965.jpg



Close up of marker.

# Levee Inspection Report By Mile - Fall 2018

#### **Sutter Maintenance Yard Wadsworth Canal**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Wadsworth Canal	Right	4.60	11/06/2018 11/06/2018	Bob Duffey

LM Start	3.28	Rating **	М	Issue No.		28 (cont)
LM End	3.28	Issue Type +	En	Location *		
Category				GPS La	atitud	e/Longitude
Calegory				Start		End
Item	DWR UCI	P Field Study		39.1531	72 °	39.153172°
пеш				-121.7347	41 °	-121.734741 °
DWR ID	23098					·

# Inspector Comment

Comment Code

FS\_ID:51516 DS\_ID:23098 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

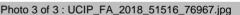
UCIP Comments: 4/10/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)10/12/2016 Crossing appears to be in good condition. (DWR Sutter Yard - afreitag)5/27/2016 Need photos of markers and levee overview. (O. Magana)4/19/2016 Crossing appears to be in good condition. No permit on file.5/12/2015 Crossing is in good condition but does not have a permit on file for it.11/18/2014 Same as last inspection.5/13/2014 Same as last inspection.5/16/2013 No known permit for work.

FIELD\_STRUCT\_DESC: 4-inch steel communication conduit through the levee, 2 feet below the crown. Fiber optics line attached to bottom of downstream side of South Butte Road bridge. Position marked with orange markers on both the waterside (WS) and landside (LS). No permit has been identified since crossing was field discovered in 2012. FS Date: 4/12/2017 10:18:34 AM

LM Start	3.28	Rating **	М	Issue No.	28 (cont)
LM End	3.28	Issue Type +	En	Location *	



Levee crown overview looking upstream





WS slope where conduit exits and attatches to downstream side of South Butte Rd bridge.

\* Location

LS : Land Side N/A : Not Applicable

WS : Water Side

CR : Crown

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected + Issue Type

Ma : Maintenance Deficiency

Ob : Design & System Obsolescence
En : Enforcement

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard Wadsworth Canal**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Wadsworth Canal	Right	4.60	11/06/2018 11/06/2018	Bob Duffey

LM Start	3.30	Rating **	М	Issue No.		9			
LM End	4.58	Issue Type +	Ма	Location *	WS				
Category				GPS Latitude/Longitude					
Calegory				Start		End			
Itom		ACE Erosion S	Survey,	39.1533	20°	39.171031 °			
пеш	ltem DRAFT				73 °	-121.727040°			
DWR ID	DWR_ST0010_02_f _ 2018_9								
	Comment Code								

# Inspector Comment

2017 Site ID: WAC 4.3 R

Status: Eroding

2017 Field Notes: Site extended downstream. Significant lower bank

erosion.

Site History: 2011 - Small erosion pocket.

LM Start	3.30	Rating **	М	Issue No.	9 (cont)
LM End	4.58	Issue Type +	Ма	Location *	WS

# Photo 1 of 2: FA\_2018\_ST0010\_43\_9\_20180905\_00009.jpg



View of the erosion along the waterside toe.

#### Photo 2 of 2: FA\_2018\_ST0010\_43\_9\_20180905\_00010.jpg



View of the erosion along the waterside toe.

# Levee Inspection Report By Mile - Fall 2018

#### **Sutter Maintenance Yard Wadsworth Canal**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Wadsworth Canal	Right	4.60	11/06/2018 11/06/2018	Bob Duffey

LM Start	3.31	Rating **	U	Issue No.	29		
LM End	3.31	Issue Type +	En	Location *			
Category			GPS Lat	tud	e/Longitude		
Calegory				Start		End	
Item	DWR UCI	P Field Study		39.15349	1°	39.153491 °	
пеш				-121.73463	3°	-121.734636 °	
DWR ID	17078					·	

# Inspector Comment

Comment Code

FS\_ID:53066 DS\_ID:17078 EP\_NO: 10473 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 10/04/2018 Two sink holes visible on the LS slope. Crossing has been upgraded from Non-Urgent to Urgent because there are signs that the pipe has failed through the LS slope. Recommend video inspection to confirm pipe failure through the levee. Need to coordinate with CVFPB to have them contact the owner of the crossing. Unable to determine the extent of damage (size of sink holes) due to dense vegetation. Notified J. Peterson with CVFPB - Enforcement Section about the updated inspection for this pipe (sink holes now present). The CVFPB - Enforcement Section is pursuing corrective actions for this pipe under CVFPB Enforcement Id (Enf ID) 14602. (O. Magana - DWR UCIP)4/10/2017 WS appears to be in good condition. No repairs appear to have been made to the LS yet. Pipe measures to be 16". (DWR Sutter Yard- AFreitag)10/12/2016 WS appears to be in good condition. LS is still very rusted where it extends over the LS ditch.(DWR Sutter Yard - afreitag)4/19/2016 No changes have been made to this crossing. LS pipe outlet is still very rusted.

5/12/2015 Pipe is very rusty at Outlet in LS channel. No noticeable

issues with WS.11/18/2014 Same as last inspection.5/13/2014 Same as last inspection.10/29/2013 Same as last inspection.5/16/2013 Same as last inspection.10/9/2012 Pipe shows signs of heavy rust at outlet in channel. Good candidate for video inspection. (W. Wylie - DWR UCIP) FIELD\_STRUCT\_DESC: 16-inch asphalt coated steel irrigation pipe through the levee, 2.7 feet below the crown. 16-inch pipe was measured during the UCIP field inspection. Record sources at this location reference the following pipe diameter size: USACE O&M manual references a 24-inch pipe, levee log references a 22-inch pipe, and permit records reference a 22-inch pipe. Unable to determine if original 22-inch pipe is still present through the levee. Vertical pump in the channel with a service pole on the waterside (WS) berm. Pipe discharges into a 36-inch concrete standpipe located on the landside (LS) toe of the levee. (Retain existing 22-inch pipe through levee and remove existing 12-inch pipe and replaced with 12-inch pipe under Permit No. 5622, 1967 - Webb. Remove 12-inch pipe and replace with 12-inch pipe under Permit No. 10473, 1976 - Brown. Install 16-inch pipe from canal to levee slope and modify existing 22-inch pipe under Permit No. 10473-A, 1976 - Brown). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 135, May 1953, (Station 174+63)] FS Date: 10/4/2018 3:25:00 PM



Pump on steel pier at WS toe.

# Levee Inspection Report By Mile - Fall 2018

#### **Sutter Maintenance Yard Wadsworth Canal**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Wadsworth Canal	Right	4.60	11/06/2018 11/06/2018	Bob Duffey

LM Start	3.31	Rating **	U	Issue No.		29 (cont)
LM End	3.31	Issue Type +	En	Location *		
Category	Suppleme	ental	GPS Lat	e/Longitude		
Calegory				Start		End
Item	DWR UCI	P Field Study		39.15349	1°	39.153491 °
пеш				-121.73463	3°	-121.734636 °
DWR ID	17078					·

# Inspector Comment

Comment Code

FS\_ID:53066 DS\_ID:17078 EP\_NO: 10473 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 10/04/2018 Two sink holes visible on the LS slope. Crossing has been upgraded from Non-Urgent to Urgent because there are signs that the pipe has failed through the LS slope. Recommend video inspection to confirm pipe failure through the levee. Need to coordinate with CVFPB to have them contact the owner of the crossing. Unable to determine the extent of damage (size of sink holes) due to dense vegetation. Notified J. Peterson with CVFPB - Enforcement Section about the updated inspection for this pipe (sink holes now present). The CVFPB - Enforcement Section is pursuing corrective actions for this pipe under CVFPB Enforcement Id (Enf ID) 14602. (O. Magana - DWR UCIP)4/10/2017 WS appears to be in good condition. No repairs appear to have been made to the LS yet. Pipe measures to be 16". (DWR Sutter Yard- AFreitag)10/12/2016 WS appears to be in good condition. LS is still very rusted where it extends over the LS ditch.(DWR Sutter Yard - afreitag)4/19/2016 No changes have been made to this crossing. LS pipe outlet is still very rusted.

5/12/2015 Pipe is very rusty at Outlet in LS channel. No noticeable issues with WS.11/18/2014 Same as last inspection.5/13/2014

Same as last inspection.10/29/2013 Same as last inspection.5/16/2013 Same as last inspection.10/9/2012 Pipe shows signs of heavy rust at outlet in channel. Good candidate for video inspection. (W. Wylie - DWR UCIP) FIELD\_STRUCT\_DESC: 16-inch asphalt coated steel irrigation pipe through the levee, 2.7 feet below the crown. 16-inch pipe was measured during the UCIP field inspection. Record sources at this location reference the following pipe diameter size: USACE O&M manual references a 24-inch pipe, levee log references a 22-inch pipe, and permit records reference a 22-inch pipe. Unable to determine if original 22-inch pipe is still present through the levee. Vertical pump in the channel with a service pole on the waterside (WS) berm. Pipe discharges into a 36-inch concrete standpipe located on the landside (LS) toe of the levee. (Retain existing 22-inch pipe through levee and remove existing 12-inch pipe and replaced with 12-inch pipe under Permit No. 5622, 1967 - Webb. Remove 12-inch pipe and replace with 12-inch pipe under Permit No. 10473, 1976 - Brown. Install 16-inch pipe from canal to levee slope and modify existing 22-inch pipe under Permit No. 10473-A, 1976 - Brown). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 135, May 1953, (Station 174+63)]



Rusted outlet at LS channel. Unclear if this is same pipe as one under investigation.

FS Date: 10/4/2018 3:25:00 PM

# Levee Inspection Report By Mile - Fall 2018

#### **Sutter Maintenance Yard Wadsworth Canal**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Wadsworth Canal	Right	4.60	11/06/2018 11/06/2018	Bob Duffey

LM Start	3.31	Rating **	U	Issue No.		29 (cont)
LM End	3.31	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS La	e/Longitude	
Calegory				Start		End
Item	DWR UCI	P Field Study		39.15349	)1 °	39.153491 °
пеш				-121.73463	86°	-121.734636 °
DWR ID	17078					·

#### Inspector Comment

Comment Code

FS\_ID:53066 DS\_ID:17078 EP\_NO: 10473 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 10/04/2018 Two sink holes visible on the LS slope. Crossing has been upgraded from Non-Urgent to Urgent because there are signs that the pipe has failed through the LS slope. Recommend video inspection to confirm pipe failure through the levee. Need to coordinate with CVFPB to have them contact the owner of the crossing. Unable to determine the extent of damage (size of sink holes) due to dense vegetation. Notified J. Peterson with CVFPB - Enforcement Section about the updated inspection for this pipe (sink holes now present). The CVFPB - Enforcement Section is pursuing corrective actions for this pipe under CVFPB Enforcement Id (Enf ID) 14602. (O. Magana - DWR UCIP)4/10/2017 WS appears to be in good condition. No repairs appear to have been made to the LS yet. Pipe measures to be 16". (DWR Sutter Yard- AFreitag)10/12/2016 WS appears to be in good condition. LS is still very rusted where it extends over the LS ditch.(DWR Sutter Yard - afreitag)4/19/2016 No changes have been made to this crossing. LS pipe outlet is still very rusted.

5/12/2015 Pipe is very rusty at Outlet in LS channel. No noticeable

issues with WS.11/18/2014 Same as last inspection.5/13/2014 Same as last inspection.10/29/2013 Same as last inspection.5/16/2013 Same as last inspection.10/9/2012 Pipe shows signs of heavy rust at outlet in channel. Good candidate for video inspection. (W. Wylie - DWR UCIP) FIELD\_STRUCT\_DESC: 16-inch asphalt coated steel irrigation pipe through the levee, 2.7 feet below the crown. 16-inch pipe was measured during the UCIP field inspection. Record sources at this location reference the following pipe diameter size: USACE O&M manual references a 24-inch pipe, levee log references a 22-inch pipe, and permit records reference a 22-inch pipe. Unable to determine if original 22-inch pipe is still present through the levee. Vertical pump in the channel with a service pole on the waterside (WS) berm. Pipe discharges into a 36-inch concrete standpipe located on the landside (LS) toe of the levee. (Retain existing 22-inch pipe through levee and remove existing 12-inch pipe and replaced with 12-inch pipe under Permit No. 5622, 1967 - Webb. Remove 12-inch pipe and replace with 12-inch pipe under Permit No. 10473, 1976 - Brown. Install 16-inch pipe from canal to levee slope and modify existing 22-inch pipe under Permit No. 10473-A, 1976 - Brown). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 135, May 1953, (Station 174+63)]

Photo 3 of 3: UCIP\_FA\_2018\_53066\_78288.jpg



Overview photo of crossings from opposite bank. Pipe to left is associated with dsid 17078 and pipe to right is dsid 17081.

FS Date: 10/4/2018 3:25:00 PM

# Levee Inspection Report By Mile - Fall 2018

#### **Sutter Maintenance Yard Wadsworth Canal**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Wadsworth Canal	Right	4.60	11/06/2018 11/06/2018	Bob Duffey

LM Start	3.31	Rating **	U	Issue No.		30
LM End	3.31	Issue Type +	En	Location *		
Category	Supplemental			GPS La	titud	e/Longitude
Calegory			St			End
Item	DWR UCI	P Field Study		39.1535	30°	39.153530°
пеш				-121.73462	20°	-121.734620°
DWR ID	17081					

#### Inspector Comment

Comment Code

FS\_ID:53067 DS\_ID:17081 EP\_NO: 5622 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 10/04/2018 Pipe measured in the field: Pipe size is 14 inches instead of 15 inches, as previously referenced. Unable to locate the hole rusted through the 12-inch pipe previously referenced in 2013 due to dense vegetation. Crossing remains Urgent due to the unknown conditions through the levee and from the standpipe to LS exposed pipe section. Recommend video inspection through the crossing to determine pipe integrity. Notified J. Peterson with CVFPB -Enforcement Section about the updated inspection for this pipe. The CVFPB - Enforcement Section is pursuing corrective actions for this pipe under CVFPB Enforcement Id (Enf ID) 14602. (O. Magana - DWR UCIP)4/10/2017 WS appears to be in good condition. No reparis appear to have been made yet to the LS. Pipe measures to be 15" (DWR Sutter Yard- AFreitag)10/12/2016 WS seems to be in good conditon. No repairs have been made yet where the pipe appears to be leaking under the LS toe road.(DWR Sutter Yard - afreitag)4/19/2016 No repairs seem to have been made yet. Pipe still appears to be leaking under the LS toe road. (DWR Sutter Yard - afreitag)5/12/2015 Pipe appears to have not yet been repaired. Still looks to be leaking under the LS toe road. (DWR Sutter Yard - afreitag)11/18/2014 Same as last inspection. (DWR Sutter Yard - afreitag)5/13/2014 Same as last inspection. (DWR Sutter Yard - afreitag)10/29/2013 Same as last inspection. (DWR Sutter Yard - afreitag)5/16/2013 Signs of leaks near concrete stand pipe on LS toe-road. Area about 20ft. long is muddy and there has not been any rain for a few weeks. (DWR Sutter Yard - afreitag)

FIELD\_STRUCT\_DESC: 14-inch steel irrigation pipe through the levee, 2.7 feet below the crown. Vertical pumps located in the channel. Power pole on the waterside (WS) slope. Pipe discharges into 36-inch concrete standpipe located on the landside (LS) toe. 16-inch corrugated metal pipe (CMP) riser located on the LS shoulder. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 135, May 1953, (Station 174+60)].

FS Date: 10/4/2018 3:28:00 PM



Pump station in channel on WS

# Levee Inspection Report By Mile - Fall 2018

#### **Sutter Maintenance Yard Wadsworth Canal**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Wadsworth Canal	Right	4.60	11/06/2018 11/06/2018	Bob Duffey

LM Start	3.31	Rating **	U	Issue No.		30 (cont)
LM End	3.31	Issue Type +	En	Location *		
Category	Suppleme	Supplemental		GPS La	titud	e/Longitude
Calegory				Start		End
Item	DWR UCI	P Field Study		39.1535	30°	39.153530°
item				-121.7346	20°	-121.734620°
DWR ID	17081					

#### Inspector Comment

Comment Code

FS\_ID:53067 DS\_ID:17081 EP\_NO: 5622 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 10/04/2018 Pipe measured in the field: Pipe size is 14 inches instead of 15 inches, as previously referenced. Unable to locate the hole rusted through the 12-inch pipe previously referenced in 2013 due to dense vegetation. Crossing remains Urgent due to the unknown conditions through the levee and from the standpipe to LS exposed pipe section. Recommend video inspection through the crossing to determine pipe integrity. Notified J. Peterson with CVFPB -Enforcement Section about the updated inspection for this pipe. The CVFPB - Enforcement Section is pursuing corrective actions for this pipe under CVFPB Enforcement Id (Enf ID) 14602. (O. Magana - DWR UCIP)4/10/2017 WS appears to be in good condition. No reparis appear to have been made yet to the LS. Pipe measures to be 15" (DWR Sutter Yard- AFreitag)10/12/2016 WS seems to be in good conditon. No repairs have been made yet where the pipe appears to be leaking under the LS toe road.(DWR Sutter Yard - afreitag)4/19/2016 No repairs seem to have been made yet. Pipe still appears to be leaking under the LS toe road. (DWR Sutter Yard - afreitag)5/12/2015 Pipe appears to have not yet been repaired. Still looks to be leaking under the LS toe road. (DWR Sutter Yard - afreitag)11/18/2014 Same as last inspection. (DWR Sutter Yard - afreitag)5/13/2014 Same as last inspection. (DWR Sutter Yard - afreitag)10/29/2013 Same as last inspection. (DWR Sutter Yard - afreitag)5/16/2013 Signs of leaks near concrete stand pipe on LS toe-road. Area about 20ft. long is muddy and there has not been any rain for a few weeks. (DWR Sutter Yard - afreitag)

FIELD\_STRUCT\_DESC: 14-inch steel irrigation pipe through the levee, 2.7 feet below the crown. Vertical pumps located in the channel. Power pole on the waterside (WS) slope. Pipe discharges into 36-inch concrete standpipe located on the landside (LS) toe. 16-inch corrugated metal pipe (CMP) riser located on the LS shoulder. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 135, May 1953, (Station 174+60)].

FS Date: 10/4/2018 3:28:00 PM



36in, concrete standpipe and 12in, cm riser on LS.

# Levee Inspection Report By Mile - Fall 2018

#### **Sutter Maintenance Yard Wadsworth Canal**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Wadsworth Canal	Right	4.60	11/06/2018 11/06/2018	Bob Duffey

LM Start	3.31	Rating **	U	Issue No.		30 (cont)
LM End	3.31	Issue Type +	En	Location *		
Category	Suppleme	Supplemental		GPS La	titud	e/Longitude
Calegory				Start		End
Item	DWR UCI	P Field Study		39.1535	30°	39.153530°
item				-121.7346	20°	-121.734620°
DWR ID	17081					

#### Inspector Comment

Comment Code

FS\_ID:53067 DS\_ID:17081 EP\_NO: 5622 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 10/04/2018 Pipe measured in the field: Pipe size is 14 inches instead of 15 inches, as previously referenced. Unable to locate the hole rusted through the 12-inch pipe previously referenced in 2013 due to dense vegetation. Crossing remains Urgent due to the unknown conditions through the levee and from the standpipe to LS exposed pipe section. Recommend video inspection through the crossing to determine pipe integrity. Notified J. Peterson with CVFPB -Enforcement Section about the updated inspection for this pipe. The CVFPB - Enforcement Section is pursuing corrective actions for this pipe under CVFPB Enforcement Id (Enf ID) 14602. (O. Magana - DWR UCIP)4/10/2017 WS appears to be in good condition. No reparis appear to have been made yet to the LS. Pipe measures to be 15" (DWR Sutter Yard- AFreitag)10/12/2016 WS seems to be in good conditon. No repairs have been made yet where the pipe appears to be leaking under the LS toe road.(DWR Sutter Yard - afreitag)4/19/2016 No repairs seem to have been made yet. Pipe still appears to be leaking under the LS toe road. (DWR Sutter Yard - afreitag)5/12/2015 Pipe appears to have not yet been repaired. Still looks to be leaking under the LS toe road. (DWR Sutter Yard - afreitag)11/18/2014 Same as last inspection. (DWR Sutter Yard - afreitag)5/13/2014 Same as last inspection. (DWR Sutter Yard - afreitag)10/29/2013 Same as last inspection. (DWR Sutter Yard - afreitag)5/16/2013 Signs of leaks near concrete stand pipe on LS toe-road. Area about 20ft. long is muddy and there has not been any rain for a few weeks. (DWR Sutter Yard - afreitag)

FIELD\_STRUCT\_DESC: 14-inch steel irrigation pipe through the levee, 2.7 feet below the crown. Vertical pumps located in the channel. Power pole on the waterside (WS) slope. Pipe discharges into 36-inch concrete standpipe located on the landside (LS) toe. 16-inch corrugated metal pipe (CMP) riser located on the LS shoulder. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 135, May 1953, (Station 174+60)].

FS Date: 10/4/2018 3:28:00 PM



Inside of 36in. concrete riser

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard Wadsworth Canal**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Wadsworth Canal	Right	4.60	11/06/2018 11/06/2018	Bob Duffey

LM Start	3.42	Rating **	Α	Issue No.		4	
LM End	3.46	Issue Type +	Ма	Location *		WS	
0-4	Earthen L	evee		GPS La	atitud	le/Longitude	
Category				Start		End	
Item	Erosion / I	Bank Caving		39.1550	57°	39.155590°	
пеш				-121.7339	85°	-121.733733°	
DWR ID DWR_ST0010_02_s _ 2012_4							
		Comn	nent Cod	de			
E1 : Note a	and monito	r erosion site					
		Inspecto	or Comm	nent			
Inspector Comment The erosion along the waterside channel was repaired by Sutter Maintenance Yard.							

LM Start	3.42	Rating **	Α	Issue No.	4 (cont)
I M End	3.46	Issue Type +	Ma	Location *	WS

# Photo 1 of 2 : FA\_2018\_ST0010\_43\_4\_20181106\_00037.jpg

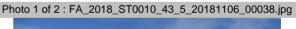
View of the repaired erosion along the waterside channel.

Photo 2 of 2 : FA\_2018\_ST0010\_43\_4\_20180905\_00002.jpg



View of the erosion at the waterside toe.

LM Start	3.54	Rating **	Α	Issue No.		5	
LM End	3.76	Issue Type +	Ма	Location *	WS		
Category	Earthen Levee			GPS Latitude/Longitude			
Calegory				Start		End	
Erosion / Bank Caving			39.156753°		39.159795°		
item				-121.733267°		-121.731953°	
DWR ID	DWR_ST0010_02_s _ 2012_5						
Comment Code							
E1 : Note and monitor erosion site.							
Inspector Comment							
The erosion along the waterside channel was repaired by Sutter Maintenance Yard.							





View of the repaired erosion along the waterside channel.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard Wadsworth Canal**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Wadsworth Canal	Right	4.60	11/06/2018 11/06/2018	Bob Duffey

LM Start	3.54	Rating **	Α	Issue No.		5 (cont)	
LM End	3.76	Issue Type +	Ma	Location *		WS	
Category Earthen Levee				GPS Latitude/Longitude			
				Start		End	
Item Erosion / Bank Caving				39.156753°		39.159795°	
пеш			-121.733267 °		-121.731953 °		
DWR ID DWR_ST0010_02_s _ 2012_5							
Comment Code							
E1 : Note and monitor erosion site.							

#### Inspector Comment

The erosion along the waterside channel was repaired by Sutter Maintenance Yard.



View of the erosion along the waterside toe.

LM Start	4.41	Rating **	Α	Issue No.		7	
LM End	4.51	Issue Type +	Ма	Location *		WS	
Category Earthen Levee				GPS Latitude/Longitude			
Calegory				Start		End	
Item Erosion / Bank Caving			39.1686	52°	39.170110°		
item				-121.7282	02 °	-121.727608°	
DWR ID	DWR_ST0010_02_s _ 2012_7						

# Comment Code

E1 : Note and monitor erosion site.

#### Inspector Comment

The erosion along the waterside channel was repaired by Sutter Maintenance Yard.

LM Start	4.41	Rating **	Α	Issue No.	7 (cont)
LM End	4.51	Issue Type +	Ma	Location *	WS

#### Photo 1 of 2: FA\_2018\_ST0010\_43\_7\_20181106\_00039.jpg



View of the repaired erosion along the waterside channel.

#### Photo 2 of 2: FA\_2018\_ST0010\_43\_7\_20180905\_00005.jpg



View of the erosion along the WS toe.

\* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating
A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiency
C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

\*\* Rating
A: Acceptable M: N: Not Inspected/Rated M: Ma: Maintenance Deficiency
Ob: Design & System Obsolescence
En: Enforcement